

2005 Transportation Strategic Plan – Freight-related Strategies

Source: http://www.seattle.gov/transportation/tsp_2005.htm

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S3.3	<p>Define and Map the Following Truck Classifications ...</p> <p>MAJOR TRUCK STREETS: Arterial streets that accommodate significant freight movement through the city and to and from major freight traffic generators. Major Truck Streets generally carry heavier loads and higher truck volumes. SDOT uses the designation of Major Truck Street on an on-going basis as an important criteria for street design, traffic management decisions and pavement design and repair.</p>	55
S4.6	<p>Designate an Industrial Access Street Type.</p> <p>Industrial Access Streets are arterials and non-arterials that are adjacent to industrial, manufacturing, and commercial land uses (not neighborhood commercial land uses). They are designed to accommodate significant volumes of large vehicles such as trucks, trailers, and other delivery vehicles. Because these areas are relatively low-density, bicycle and pedestrian travel is more infrequent than in other types of neighborhoods. Industrial Access Streets typically consist of two to four travel lanes, which are generally wider—15 to 20 feet wide—to accommodate movement of larger vehicles. Bike lanes and on-street parking are rare on Industrial Access Streets. Sidewalks are provided but are generally narrower than in higher-density commercial and retail areas.</p>	60
GS1.1	<p>Define and Map a Street Classification to Accommodate Significant Freight Movement within Seattle.</p> <p>The TSP “Making the Best Use of the Streets We Have to Move People, Goods and Services” section defines a street classification system to guide the design and operation of the City’s street system, including for significant freight movement. Monitor these streets and other arterials and make operating, design, access and/or service changes, as well as capital investments, to accommodate trucks and to preserve and improve commercial transportation mobility.</p>	101
GS1.2	<p>Address Site-Specific Obstacles to Truck Movement.</p> <p>Institutionalize an annual truck spot improvement program to address restrictive conditions that may exist on major freight corridors to enhance the ability of trucks to operate on the existing streets. Improvements that support truck movement include:</p> <ul style="list-style-type: none"> • increasing curb radii on critical corners • removing on-street parking in key locations • relocating utility poles that are too close to the curb • installing signage (street name designation and truck directional signing) • providing truck queue lanes/holding lanes at major terminal access points • revising intersection signal control to assist truck turning movements that now typically require a long wait for an adequate traffic gap. <p>SDOT maintains and augments an inventory of known site-specific obstacles to truck</p>	101

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	movement on major truck streets to help with prioritization as funding becomes available or for consideration in design of already funded projects.	
GS1.3	<p>Design Standards for Oversized Vehicles.</p> <p>As is characteristic of the historic development of Seattle, many City streets were not designed to current standards. Aging infrastructure has also taken its toll on street conditions. Implementing street changes for freight will be an incremental process of improving the physical environment as opportunities and funding permit. Trucking operators have expressed concern that the City’s existing street design standards are not adequate for the larger and heavier trucks that are prevalent today. The City will continue to review current standards and modify them to ensure that when arterials— especially Major Truck Streets (see Figure 25: Major Truck Streets)—are redesigned and rebuilt, they are better able to accommodate truck movements, in coordination with other street use needs.</p> <p>However, there will continue to be many locations on the Seattle street system where large trucks will not be able to travel. Where space is extremely constrained, other options will need to be considered. For example, in neighborhood business districts with limited street space, consideration will be given to encourage smaller truck usage to allow local access to constrained curbside loading areas.</p> <p>In addition to identifying a street classification for major freight movement, the City of Seattle has a program to accommodate the movement of overlegal vehicles within and through the city. Overlegal vehicles are those that are over length, over width, over height or over weight. Examples are the shipment of Boeing airplane tail assemblies, large cranes, and houses. On a regular basis, the SDOT Commercial Vehicle Enforcement officers issue permits to identify and specify appropriate routes and to assist individual trips with accomplishing their journey. The standards for oversized and overlegal vehicles are being revised as part of the Right-of-Way Improvements Manual update.</p>	101
GS1.4	<p>Improve Pavement Conditions on All Routes Used for Truck Access.</p> <p>Use the street classification designation for freight movement as one of the criteria for determining paving priorities. Roadway surface conditions are also an important factor for truck mobility and access. Truck access routes tend to deteriorate more quickly than other streets because they carry heavier loads and higher volumes.</p> <p>Some of Seattle’s most important local industrial streets were never formally designed or constructed to city standards. Streets that were never designed for heavy industrial traffic are providing important lifelines for freight and commerce. SDOT makes spot repairs to these streets as necessary to keep commerce moving, but it never has had the funds to reconstruct, improve, or even to perform preventive maintenance on its local industrial streets. The problem of local industrial street maintenance is especially severe in the industrial areas of South Downtown, Georgetown and South Park, where the number and weight of industrial vehicles greatly exceeds the capacity of the local industrial streets.</p> <p>To help address this need, since 2000, SDOT has set aside a portion of its maintenance funds as a match for small, local paving projects that are suggested</p>	102

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	and supported by local businesses and property owners. In several instances, the local businesses have coordinated their efforts through a non-governmental, community-based organization, which has applied for additional city matching funds from the Department of Neighborhoods. The addition of the Department of Neighborhoods to the partnerships has increased the amount of public money available for the projects, and correspondingly reduced the sum that the businesses have had to contribute. SDOT strongly encourages community participation in the Paving Partnership Program.	
GS1.5	<p>Pursue Grade Separation of Key Truck Streets at Heavily Used Railroad Crossings.</p> <p>Rail crossings on heavily used truck routes are difficult obstacles for truck movement, especially in the South Downtown area and at Broad Street along the North Waterfront where the BNSF mainline railroad, Amtrak and Sounder commuter rail traverse the area. Grade separations are the most effective way to eliminate these conflicts and implementing a program of grade separations is one of the City's highest freight mobility priorities. Railroad operations also greatly benefit by having a grade separation. These overcrossings or undercrossings are extremely expensive and are justifiable only where there is significant traffic on both the truck route and the rail line. Grade separations could significantly reduce the typical 8-11 minute delays encountered at current at-grade rail/street crossings of the rail mainline tracks. There are approximately 70 train movements per day across the east/west arterial streets in the Duwamish area. These train volumes and associated traffic delay are expected to increase in the future. The City has developed a list of potential grade separation projects based on the <i>Greater Duwamish Manufacturing and Industrial Center Plan</i> and the <i>Access Duwamish Freight Mobility Implementation Plan</i>. The most recent completed grade separation projects are at Atlantic Street (SR 519, Phase I where the elevated intersection connects to Interstate 90) which was opened in November 2003 in the Duwamish, and the 2001 completion of the Galer Street Flyover in Interbay. Five other projects are currently in various phases of planning and implementation. Project implementation is dependent on obtaining full project funding from the partners and the associated City fund sources.</p>	102
GS1.6	<p>Minimize Conflicts Between Trucks and Other Transportation Modes.</p> <p>There are a number of basic conflicts between medium to heavy truck traffic and other motorized, non-motorized, and pedestrian modes of transportation that the City continually needs to evaluate and address. Possible solutions might include identifying alternative routes, developing separate facilities, and clarifying priorities for specific locations.</p>	103
GS2	<p>GS2. Support Rail Enhancements That Improve Mainline Operations and Critical Non-mainline Connections that Serve Industrial Properties and Goods Transport.</p> <p>Efficiently moving containerized cargo shipments is critical to maintaining a healthy, vital economy in the Puget Sound Region. Container freight movement is increasing, especially by rail, for destinations in the Midwest and beyond. Rail is an essential and efficient option for moving freight and goods and provides an alternative to trucks for many industrial and manufacturing businesses. The increasing use of shipping</p>	103

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	<p>containers on rail is straining the throughput capacity of the region's railroads. Seattle provides an operating environment for three railroads: both the BNSF and Union Pacific railroad have mainline tracks in the city. A third short line railroad, the Ballard Terminal Railroad, provides connections between the BNSF mainline and the Ballard Industrial area north of the Ship Canal. The Duwamish Industrial Center contains several intermodal rail yards, including the BNSF Seattle International Gateway (SIG) Yard and the Union Pacific Argo Yard. BNSF operates a major maintenance locomotive facility in the Interbay industrial. Both freight and passenger train volumes are projected to increase through the city.</p> <p>Beyond freight mobility, rail is also an increasingly attractive option for commuters, evidenced by the early success of Sound Transit's Sounder line between Tacoma and Seattle. Extension of service to Everett began in late 2003 with increased service planned in the future. All of this activity strains the operational efficiency of mainline rail/street crossings in the Duwamish and in the north-end of the central waterfront. Some railroad crossing locations are adjacent to signalized arterial intersections and present potential conflicts between modes. Improved signal interconnects (communications between control equipment) which coordinate rail and street traffic can reduce safety problems (stopping or redirecting traffic before it reaches the rail crossing). Interactive traffic signs can provide information about waiting times and redirect roadway traffic from closed rail crossings.</p> <p>Technology improvements will be applied on an ongoing basis to the City's inventory of traffic signals, signage, and other devices. Such Intelligent Transportation System (ITS) efforts can often be implemented on a quicker timeframe than more capital-intensive projects, providing interim freight mobility relief until the larger, longer-term projects come to fruition.</p>	
GS3	<p>Improve Freight Access to Manufacturing and Industrial Areas.</p> <p>A healthy transportation infrastructure is essential to Seattle's manufacturing and industrial areas. Reliable, direct connections to water, rail, airport and truck facilities are important to an array of existing businesses, and our region's ability to attract new businesses. Due to the nature of these businesses, truck volumes and frequencies are higher here than in other areas of the City, and truck access is of paramount importance. To protect and improve freight access to manufacturing and industrial areas, the City should develop strategies that address the following themes:</p> <ul style="list-style-type: none"> • Preserve good ground transportation access to manufacturing and industrial sites served by freight carriers and their supportive facilities (rail, airport and marine). • Improve directional signage between manufacturing and industrial areas and the regional highway system. • Improve and protect the utility of Major Truck Streets to and from manufacturing and industrial areas. • Facilitate efficient movement of goods within the manufacturing and industrial areas. • Include local business access during construction planning in the major capital project plan process in the industrial areas. • Where safe and appropriate, allow loading and maneuvering of trucks on nonarterial access streets in industrial areas. 	103

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	<ul style="list-style-type: none"> • Improve pavement conditions on industrial arterial access streets within manufacturing and industrial areas. 	
GS3.1	<p>Define and Map a Street Type to Support Freight Access to Manufacturing and Industrial Areas.</p> <p>The “Making the Best Use of the Streets We Have to Move People, Goods and Services” section defines a street overlay network to guide street use and design features that support adjacent land uses. This overlay network includes a street type for manufacturing and industrial areas to address freight access.</p>	104
GS4	<p>Support Access to Container and Cargo Terminals.</p> <p>Continue to work with the Port of Seattle and other marine interests to implement transportation and access projects that support continued growth at container and cargo terminals. This includes joint City and Port efforts to implement the Port’s Container Terminal Access Study recommendations.</p> <p>The Port of Seattle is one of the largest West Coast cargo centers, serving as the entry and exit point for marine cargo to and from the Pacific Rim and Alaska. The Port of Seattle’s seaport is made up of 1,414 acres of waterfront land and nearby properties. Nearly 800 acres of the Port’s seaport is dedicated to container terminal operations and cargo handling. Future container volumes are forecasted to increase. Most of the freight is shipped through the Port by intermodal containers that are transferred to or from railcars or trucks on the dock. Terminals 5 and 18 include on-dock rail facilities. Some of the containers are shuttled by truck (called “drayed”) between BNSF and UPRR intermodal yards. At the intermodal yards, containers are transferred to and from railcars. Therefore, both truck and rail transport are an important part of moving cargo to and from Port terminal.</p>	104
GS5.1	<p>Improve Freight-Dependent Business Site Access Through Management of Curb Space and Alleys.</p> <p>Continue to work with business district representatives and individual businesses to install commercial and passenger load zones where appropriate.</p>	104
GS5.2	<p>Develop and Implement Goods Delivery Strategies.</p> <p>The everyday delivery of goods and services purchased by the general public, businesses and government is critical to our economy’s success. Explore strategies that address issues of goods delivery and managing operational impacts on adjacent land uses, including:</p> <ul style="list-style-type: none"> • Allow after-hour truck access on certain streets. • Balance the needs for loading zones with other curb use needs. • Ensure workable truck access and adequate loading berths in the design of new buildings in conjunction with the Department of Planning and Development review practices. • Retain alleys and ensure they work efficiently for goods delivery. • Provide and encourage the provision of suitable truck layover areas during those periods of time when trucks are restricted from entering certain urban centers. • Ensure that loading zones are reserved for freight loading and unloading as intended with appropriate levels of enforcement. 	104

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	<p>Given the historic development of Seattle's street network and land use pattern, limited right-of-way and competing uses, it is difficult and sometimes impossible to accommodate all sizes of delivery and service trucks in some established areas of the city. In such cases, the operating environment will require use of smaller trucks to make those deliveries of goods and services. To better manage the negative impacts that goods delivery may have in adjacent residential areas, the City should consider the following:</p> <ul style="list-style-type: none"> • Support use of smaller trucks within neighborhood commercial districts. • Restrict hours of operation for large trucks in neighborhood commercial and residential areas, similar to the current practice with the Seattle Central Business District. 	
GS6	<p>Freight Mobility Coordination and Implementation.</p> <p>Long-term freight mobility solutions such as railroad grade separations at track and street crossings are expensive and often involve complex funding partnerships with public and private parties including the Federal government, State, Port of Seattle, King County, and Burlington Northern Santa Fe, and Union Pacific Railroads. These challenges are currently exacerbated by struggling national and regional economies. In an environment of significant local, regional, and state budget reductions, finding funding for projects that would provide the greatest relief is a challenge.</p> <p>Important forums for creating these funding partnerships for freight include the FAST Corridor program, the state's Freight Mobility Strategic Investment Board, and the Regional Freight Mobility Roundtable. The FAST Program (Freight Action Strategy for Everett-Seattle-Tacoma) is a nationally recognized leader in delivering transportation improvements for freight mobility. Since 1996, the FAST partnership has studied freight movement via rails, roads and shipping ports to develop projects that move freight more efficiently and increase safety for cars, trucks and trains.</p> <p>FAST identified 15 top priority projects from Everett to Tacoma for phase I: seven projects are complete. More FAST phase I and II projects are in the pipeline for 2004 and 2005. The Freight Mobility Strategic Investment Board (FMSIB) was created in 1998 when the State Legislature created RCW Chapter 47.06A, Freight Mobility and the Board, for the purpose of reviewing, prioritizing, and recommending freight mobility transportation projects that are of strategic importance to the State of Washington. Their recommendations are presented to the Governor and the Legislature to provide a basis for project prioritization and funding allocations.</p> <p>SDOT will continue to work with FMSIB, and the Washington State Department of Transportation through the update to the State Transportation Plan, and will work with other local partners to articulate Seattle's freight mobility priorities.</p> <p>The Regional Freight Mobility Roundtable is a public-private forum sponsored by the Puget Sound Regional Council to define and recommend actions serving freight mobility needs in and through central Puget Sound. Private sector participants include rail, marine, air cargo and trucking carriers, and shippers such as Boeing and Weyerhaeuser. Public sector participants include local governments, the ports of Seattle, Tacoma and Everett, state agencies, and federal agencies within the U.S.</p>	105

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	<p>Department of Transportation (including rail, highway, maritime), and the Department of Defense. The Roundtable is consulted by the FAST Program and provides input into regional and state transportation plans.</p> <p>SDOT regularly participates in these forums to elevate support and advocate timely funding for Seattle area freight mobility needs. State and federal funding processes assign greater priority to project applications which offer private funding participation. SDOT encourages private funding partnerships where projects benefit the freight community. Despite funding uncertainty, SDOT has been able to identify a number of actions that can be accomplished either within existing resources or at a relatively low cost. It is important that SDOT lose neither the vision of Seattle's long-term infrastructure needs nor the urgency to make near-term progress on efforts to more efficiently move freight and goods through our transportation system.</p>	
GS6.1	<p>Build Arterial Street Projects to Benefit Freight.</p> <p>The City's Capital Improvement Program (CIP) has programmed projects to benefit freight. Project schedules and budgets occasionally change due to design changes and funding availability. These changes are reflected in the subsequent year's CIP. The annual Freight Mobility Strategic Action Plan identifies current CIP projects that benefit freight.</p>	106
GS6.2	<p>Make Traffic Engineering and Technology Improvements for Freight.</p> <p>Better management of streets through traffic engineering and the application of technology advances can make more efficient use of our street and signal system resources. These technology solutions are called Intelligent Transportation Systems (ITS). ITS is the application of state-of-the-art traffic management, communications and data technologies to provide a sophisticated set of tools to address the transportation mobility and safety needs faced by the driving public. Seattle has a very proactive traffic technology program. Traffic control computers are being upgraded annually. There currently are 19 traffic surveillance cameras providing traffic information to the public via web images. The new Traffic Management Center was put on line in 2003. Traffic data and camera images are collected; traffic control changes are made to the system; the traffic information is provide to the State and general public via web images. SDOT is planning on implementing more improvements as funding is available.</p>	106
GS6.3	<p>Maintain the Freight Mobility Advisory Committee.</p> <p>In October 2002, the Seattle Freight Mobility Advisory Committee, co-sponsored by SDOT and the Seattle Manufacturing Industrial Council (MIC), was formed to provide a regular forum for communication with City staff and other agencies. This Committee was established to provide a forum for giving input on projects and programs of interest to the freight community and to exchange information. SDOT looks to the citywide freight committee to represent the interest of various freight transportation providers and operators (including the modes of truck, rail and marine transport), and to reflect the interests of constituents both in the north and south industrial areas of the City. The Committee meets on a monthly basis at the MIC offices located in Georgetown to encourage freight community attendance and participation.</p>	106

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GS6.4	Develop Funding Partnerships to Promote Projects that Benefit Freight. SDOT regularly participates in several regional forums to elevate support and advocate for timely funding for the Seattle area’s freight mobility needs.	107
GS6.5	Improve Communication Tools for Construction-Related Traffic Impacts for Freight Mobility and Access. Construction activity and major events can present an obstacle to accessing businesses and freight destinations. Given the multiple private and public parties doing construction Seattle’s right-of-way, effective, ongoing coordination is a necessity. To better manage congestion, SDOT coordinates with the WSDOT on major maintenance and roadway improvement projects scheduled each year in and adjacent to Seattle. Parallel to this activity, SDOT is continuously refining departmental business practices to coordinate street work and potential disruption via the Street Use permit process and coordination with the Department of Planning and Development. This requires cooperation on construction decisions, and subsequently, effective sharing of construction schedule and traffic information to affected parties. Timely notification of these activities can assist freight operators in planning for alternative routes. Currently, SDOT participates in several programs to notify the freight community of construction-related traffic changes. This includes South Downtown (SODO) email alerts using the SODO Association’s electronic mailing list. SDOT also provides project input to the Port of Seattle’s “Truckers Guide” – a handy template for route planning. Finally, information of the status of major projects is maintained on the SDOT web site.	107